

CLAIMS

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1. A method for facilitating communication with a Fibre Channel controller, comprising the operations of:

5 defining a data structure having a Fibre Channel attribute value, wherein the Fibre Channel attribute value defines a functionality of a Fibre Channel controller;

enabling user modification of the Fibre Channel attribute value;

receiving a modification request from a code segment to alter the Fibre Channel attribute during operation of the Fibre Channel controller; and

10 altering the functionality of the Fibre Channel controller based on the Fibre Channel attribute value.

2. A method as recited in claim 1, further comprising the operation of modifying the Fibre Channel attribute value in response to receiving the modification
15 request.

3. A method as recited in claim 1, wherein the code segment is an Operating System Module (OSM), the OSM being capable of providing the modification request.

20 4. A method as recited in claim 3, further comprising the operation of defining a Fibre Channel Hardware Interface Module (FCHIM).

5. A method as recited in claim 4, wherein the modification request is received by the FCHIM.

5 6. A method as recited in claim 5, wherein the FCHIM alters the functionality of the Fibre Channel controller based on the Fibre Channel attribute value.

7. A profile data structure for facilitating communication with a Fibre Channel controller, comprising:

10 a Fibre Channel value field; and

a data type value related to the Fibre Channel value field, the data type value defining the data type of the Fibre Channel value field,

wherein a value in the Fibre Channel value field is accessible by an operating system dependent code module, and wherein the value in the Fibre Channel value field
15 also is accessible by an operating system independent code module.

8. A profile data structure as recited in claim 7, wherein the operating system dependent code module is an Operating System Module (OSM), the OSM being capable of receiving operating system specific commands.

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9. A profile data structure as recited in claim 8, wherein the OSM is further capable of providing operating system independent commands.

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10. A profile data structure as recited in claim 9, wherein the operating system independent code module is a Fibre Channel Hardware Interface Module (FCHIM), the FCHIM being capable of receiving the operating system independent commands.

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11. A profile data structure as recited in claim 10, wherein the FCHIM is further capable providing control signals to a Fibre Channel controller.

12. A profile data structure as recited in claim 11, wherein the FCHIM controls the Fibre Channel controller based on the value in the Fibre Channel attribute value field.

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13. A profile data structure as recited in claim 7, wherein the Fibre Channel attribute value field relates to a Fibre Channel maximum port value.

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14. A profile data structure as recited in claim 7, wherein the Fibre Channel attribute value field relates to a Fibre Channel maximum Logical Unit Number (LUN) value.

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15. A profile data structure as recited in claim 7, wherein the Fibre Channel attribute value field relates to a Fibre Channel Arbitrated Loop value.

16. A system for facilitating communication with a Fibre Channel controller, comprising:

a profile data structure having a Fibre Channel field value;

5 an operating system dependent code module in communication with the profile data structure, the operating system dependent code module capable of modifying the Fibre Channel field value; and

an operating system independent code module in communication with the profile data structure, wherein the operating system independent code module is capable of
10 altering the functionality of a Fibre Channel controller based on the Fibre Channel field value.

17. A system as recited in claim 16, wherein the operating system dependent code module is an Operating System Module (OSM), the OSM being capable of receiving
15 operating system specific commands.

18. A system as recited in claim 17, wherein the OSM is further capable of providing operating system independent commands.

20 19. A system as recited in claim 18, wherein the operating system independent code module is a Fibre Channel Hardware Interface Module (FCHIM), the FCHIM being capable of receiving the operating system independent commands.

20. A system as recited in claim 19, wherein the FCHIM is further capable providing control signals to a Fibre Channel controller.

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